

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P252646

Luminaire Tested: **LD6B70D010TE EU6B60709727 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252646
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B70D010TE EU6B60709727 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5046.0 lumens
Efficiency: N/A
Efficacy: 63.5 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

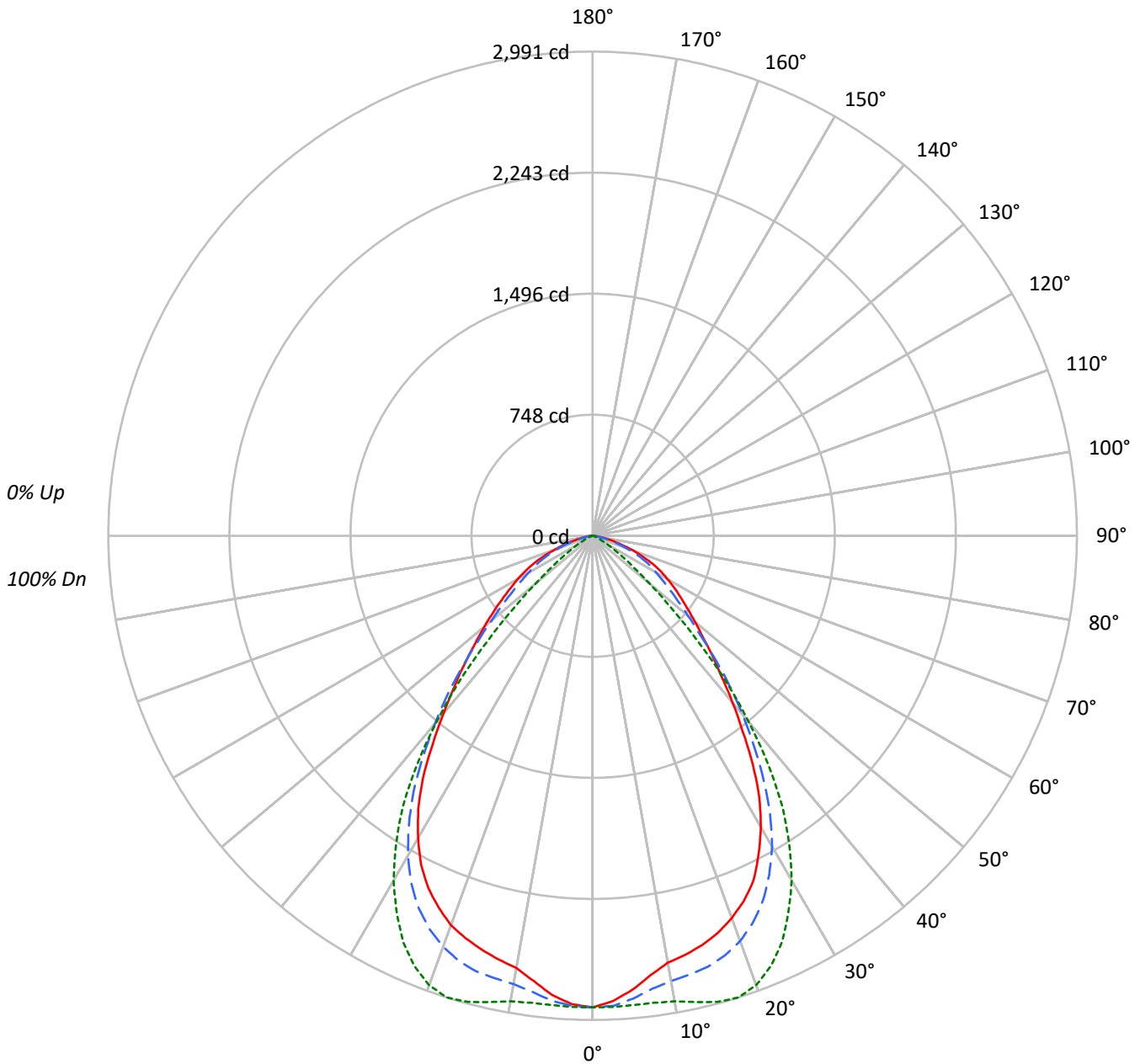
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252646

CATALOG NUMBER: LD6B70D010TE EU6B60709727 6LBDW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252646

CATALOG NUMBER: LD6B70D010TE EU6B60709727 6LBDW1LI

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89			89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79			79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70			70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62			62
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56			56
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50			50
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46			46
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42			42
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38			38
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35			35

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	190066	190066	190066
5°	184393	190569	186600
10°	177377	193441	179609
15°	176751	201323	178797
20°	174437	205068	177714
25°	169230	199291	172865
30°	156543	185215	162381
35°	137338	162824	145382
40°	114446	127646	121906
45°	96333	84210	102856
50°	83410	46150	88535
55°	75469	24523	77380
60°	69429	12748	69429
65°	62907	6762	61348
70°	50759	3853	46906
75°	34811	2546	32265
80°	22768	1277	20251
85°	15121	2545	12576



TEST NUMBER: P252646

CATALOG NUMBER: LD6B70D010TE EU6B60709727 6LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.7	5.4
10°-20°	785.5	15.6
20°-30°	1160.6	23.0
30°-40°	1172.3	23.2
40°-50°	808.0	16.0
50°-60°	464.1	9.2
60°-70°	270.1	5.4
70°-80°	98.5	2.0
80°-90°	15.1	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2217.8	44.0
0°-40°	3390.2	67.2
0°-60°	4662.3	92.4
0°-90°	5046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5046.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2913	2913	2913	2913	2913	
5°	2816	2870	2910	2883	2849	264
15°	2617	2755	2981	2785	2647	737
25°	2351	2489	2768	2540	2401	1071
35°	1724	1842	2044	1926	1825	1070
45°	1044	1058	913	1125	1115	812
55°	664	583	216	606	680	597
65°	408	344	44	340	397	399
75°	138	111	10	108	128	156
85°	20	10	3	14	17	26
90°	0	0	0	0	0	



TEST NUMBER: P252646

CATALOG NUMBER: LD6B70D010TE EU6B60709727 6LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3
2.5°	2876.3	2879.6	2883.0	2879.6	2883.0	2896.5	2886.4	2893.1	2893.1	2896.5	2906.6
5°	2815.6	2815.6	2822.4	2819.0	2829.1	2842.6	2832.5	2842.6	2845.9	2852.7	2869.5
7.5°	2738.2	2738.2	2741.5	2741.5	2755.0	2768.5	2761.7	2775.2	2788.7	2802.2	2822.4
10°	2677.5	2684.3	2684.3	2687.7	2701.1	2718.0	2714.6	2731.4	2744.9	2765.1	2792.1
12.5°	2650.6	2654.0	2654.0	2660.7	2674.2	2691.0	2687.7	2704.5	2724.7	2748.3	2775.2
15°	2616.9	2623.7	2620.3	2627.0	2640.5	2657.3	2654.0	2670.8	2694.4	2718.0	2755.0
17.5°	2573.1	2576.5	2579.9	2579.9	2593.3	2606.8	2606.8	2623.7	2650.6	2677.5	2718.0
20°	2512.5	2519.3	2519.3	2522.6	2532.7	2552.9	2549.6	2566.4	2593.3	2620.3	2664.1
22.5°	2441.8	2445.2	2445.2	2448.5	2465.4	2475.5	2478.8	2492.3	2515.9	2546.2	2586.6
25°	2350.9	2354.2	2350.9	2361.0	2367.7	2387.9	2381.2	2398.0	2424.9	2448.5	2488.9
27.5°	2219.5	2226.2	2226.2	2229.6	2246.4	2263.3	2263.3	2280.1	2303.7	2320.5	2361.0
30°	2078.0	2088.2	2078.0	2094.9	2101.6	2115.1	2125.2	2135.3	2155.5	2179.1	2216.1
32.5°	1916.4	1913.0	1916.4	1923.1	1943.3	1953.4	1960.2	1970.3	1990.5	2010.7	2041.0
35°	1724.4	1731.1	1734.5	1748.0	1748.0	1764.8	1768.2	1774.9	1805.2	1818.7	1842.3
37.5°	1522.3	1529.1	1532.4	1539.2	1552.6	1559.4	1569.5	1579.6	1599.8	1623.4	1636.8
40°	1343.8	1343.8	1347.2	1353.9	1364.0	1367.4	1377.5	1391.0	1404.4	1424.7	1438.1
42.5°	1175.4	1178.8	1175.4	1182.2	1192.3	1205.7	1202.4	1219.2	1222.6	1236.1	1246.2
45°	1044.1	1044.1	1037.3	1044.1	1044.1	1057.5	1054.2	1060.9	1057.5	1064.3	1057.5
47.5°	919.5	922.8	919.5	922.8	922.8	922.8	926.2	919.5	922.8	912.7	892.5
50°	821.8	825.2	818.4	821.8	818.4	815.1	818.4	808.3	804.9	791.5	771.3
52.5°	737.6	734.2	730.9	730.9	730.9	727.5	724.1	714.0	703.9	690.4	666.9
55°	663.5	660.1	656.8	656.8	650.0	646.7	646.7	636.5	626.4	609.6	582.7
57.5°	596.1	592.8	589.4	589.4	586.0	579.3	579.3	569.2	555.7	535.5	511.9
60°	532.1	532.1	532.1	528.8	528.8	522.0	522.0	511.9	498.5	478.3	451.3
62.5°	474.9	471.5	471.5	471.5	471.5	468.1	464.8	458.0	444.6	424.4	400.8
65°	407.5	407.5	407.5	407.5	404.2	404.2	404.2	394.1	387.3	367.1	343.5
67.5°	333.4	333.4	333.4	333.4	330.1	333.4	333.4	326.7	320.0	299.8	279.5
70°	266.1	262.7	259.3	262.7	259.3	259.3	262.7	256.0	252.6	235.8	215.6
72.5°	195.3	198.7	195.3	195.3	195.3	192.0	195.3	192.0	185.2	171.8	158.3
75°	138.1	141.5	141.5	138.1	138.1	138.1	134.7	134.7	128.0	117.9	111.1
77.5°	94.3	94.3	94.3	94.3	90.9	90.9	90.9	87.6	84.2	77.5	70.7
80°	60.6	60.6	60.6	60.6	57.3	57.3	57.3	53.9	53.9	47.2	40.4
82.5°	37.0	37.0	37.0	37.0	37.0	37.0	33.7	33.7	30.3	26.9	23.6
85°	20.2	20.2	20.2	20.2	20.2	20.2	20.2	16.8	16.8	13.5	10.1
87.5°	6.7	6.7	10.1	10.1	10.1	10.1	10.1	10.1	6.7	6.7	6.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252646

CATALOG NUMBER: LD6B70D010TE EU6B60709727 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3
2.5°	2899.8	2903.2	2903.2	2903.2	2913.3	2916.7	2906.6	2896.5	2916.7	2913.3	2920.0
5°	2866.2	2876.3	2883.0	2886.4	2896.5	2903.2	2893.1	2889.7	2906.6	2909.9	2913.3
7.5°	2825.7	2842.6	2859.4	2866.2	2879.6	2886.4	2883.0	2883.0	2903.2	2909.9	2909.9
10°	2798.8	2822.4	2842.6	2859.4	2876.3	2886.4	2886.4	2889.7	2913.3	2920.0	2926.8
12.5°	2792.1	2822.4	2849.3	2872.9	2886.4	2903.2	2906.6	2916.7	2940.3	2950.4	2950.4
15°	2775.2	2815.6	2849.3	2879.6	2899.8	2920.0	2926.8	2947.0	2973.9	2980.7	2987.4
17.5°	2744.9	2785.3	2825.7	2862.8	2889.7	2906.6	2926.8	2947.0	2980.7	2990.8	2994.1
20°	2691.0	2738.2	2778.6	2815.6	2842.6	2866.2	2886.4	2909.9	2940.3	2953.7	2957.1
22.5°	2610.2	2657.3	2697.8	2738.2	2765.1	2785.3	2805.5	2832.5	2862.8	2876.3	2876.3
25°	2512.5	2556.3	2600.1	2630.4	2657.3	2680.9	2691.0	2721.3	2751.6	2768.5	2768.5
27.5°	2387.9	2428.3	2468.7	2502.4	2519.3	2539.5	2556.3	2583.2	2606.8	2620.3	2633.8
30°	2229.6	2270.0	2307.1	2340.7	2361.0	2381.2	2398.0	2418.2	2441.8	2458.6	2462.0
32.5°	2057.8	2091.5	2128.6	2162.2	2182.5	2189.2	2206.0	2226.2	2246.4	2259.9	2263.3
35°	1869.2	1892.8	1916.4	1946.7	1966.9	1966.9	1983.7	1997.2	2014.1	2044.4	2037.6
37.5°	1646.9	1680.6	1697.5	1707.6	1721.0	1734.5	1737.9	1754.7	1774.9	1781.7	1791.8
40°	1438.1	1448.2	1458.3	1458.3	1471.8	1471.8	1471.8	1475.2	1495.4	1498.8	1512.2
42.5°	1229.3	1229.3	1219.2	1209.1	1212.5	1209.1	1192.3	1192.3	1202.4	1215.8	1215.8
45°	1034.0	1010.4	980.1	956.5	939.7	932.9	912.7	912.7	909.4	912.7	926.2
47.5°	868.9	828.5	778.0	730.9	714.0	700.5	670.2	656.8	650.0	653.4	660.1
50°	730.9	687.1	629.8	572.6	542.2	525.4	488.4	464.8	461.4	454.7	468.1
52.5°	629.8	575.9	515.3	447.9	417.6	390.7	350.3	330.1	316.6	316.6	320.0
55°	542.2	485.0	417.6	350.3	320.0	299.8	259.3	232.4	218.9	215.6	225.7
57.5°	468.1	414.3	346.9	279.5	249.2	225.7	185.2	161.7	151.6	144.8	148.2
60°	410.9	357.0	289.6	225.7	198.7	171.8	138.1	111.1	97.7	97.7	101.0
62.5°	357.0	306.5	245.9	185.2	161.7	138.1	101.0	77.5	67.4	64.0	67.4
65°	303.1	256.0	205.4	154.9	131.4	111.1	80.8	60.6	47.2	43.8	47.2
67.5°	245.9	208.8	165.0	124.6	104.4	87.6	60.6	43.8	33.7	30.3	33.7
70°	192.0	158.3	124.6	90.9	77.5	64.0	43.8	33.7	23.6	20.2	23.6
72.5°	138.1	114.5	87.6	64.0	53.9	43.8	30.3	23.6	16.8	13.5	16.8
75°	94.3	77.5	57.3	40.4	33.7	30.3	20.2	13.5	10.1	10.1	10.1
77.5°	60.6	47.2	37.0	26.9	20.2	16.8	10.1	6.7	6.7	6.7	6.7
80°	33.7	26.9	20.2	13.5	10.1	10.1	6.7	6.7	3.4	3.4	3.4
82.5°	20.2	13.5	10.1	6.7	6.7	3.4	3.4	3.4	3.4	3.4	3.4
85°	10.1	6.7	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
87.5°	3.4	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252646

CATALOG NUMBER: LD6B70D010TE EU6B60709727 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3
2.5°	2906.6	2909.9	2899.8	2913.3	2903.2	2916.7	2916.7	2903.2	2906.6	2899.8	2913.3
5°	2899.8	2899.8	2893.1	2903.2	2889.7	2903.2	2899.8	2876.3	2883.0	2869.5	2883.0
7.5°	2899.8	2893.1	2883.0	2893.1	2876.3	2886.4	2872.9	2849.3	2842.6	2825.7	2825.7
10°	2909.9	2899.8	2886.4	2889.7	2872.9	2876.3	2856.1	2822.4	2812.3	2792.1	2785.3
12.5°	2933.5	2923.4	2903.2	2909.9	2886.4	2886.4	2859.4	2819.0	2798.8	2771.9	2765.1
15°	2967.2	2950.4	2926.8	2930.1	2906.6	2893.1	2859.4	2812.3	2785.3	2748.3	2738.2
17.5°	2973.9	2957.1	2926.8	2926.8	2896.5	2879.6	2839.2	2785.3	2751.6	2714.6	2694.4
20°	2936.9	2920.0	2886.4	2883.0	2856.1	2832.5	2788.7	2734.8	2701.1	2660.7	2643.9
22.5°	2859.4	2839.2	2808.9	2805.5	2778.6	2765.1	2718.0	2664.1	2630.4	2590.0	2576.5
25°	2744.9	2734.8	2704.5	2701.1	2677.5	2660.7	2620.3	2569.8	2539.5	2499.0	2485.6
27.5°	2610.2	2600.1	2569.8	2569.8	2542.8	2532.7	2495.7	2448.5	2424.9	2387.9	2371.1
30°	2448.5	2435.1	2418.2	2414.8	2391.3	2381.2	2347.5	2303.7	2280.1	2249.8	2243.1
32.5°	2256.6	2246.4	2236.3	2233.0	2209.4	2199.3	2175.7	2131.9	2111.7	2084.8	2074.7
35°	2034.3	2027.5	2017.4	2014.1	2004.0	1993.8	1970.3	1936.6	1926.5	1906.3	1896.2
37.5°	1778.3	1785.0	1778.3	1778.3	1768.2	1771.6	1751.4	1731.1	1721.0	1707.6	1700.8
40°	1502.1	1515.6	1525.7	1525.7	1522.3	1535.8	1532.4	1515.6	1512.2	1505.5	1502.1
42.5°	1222.6	1229.3	1249.5	1263.0	1259.6	1293.3	1296.7	1310.1	1320.3	1313.5	1316.9
45°	929.6	949.8	976.7	990.2	1007.0	1050.8	1074.4	1101.3	1124.9	1138.4	1135.0
47.5°	670.2	693.8	724.1	744.3	774.6	828.5	889.1	922.8	956.5	973.3	990.2
50°	485.0	508.6	545.6	575.9	596.1	670.2	734.2	778.0	815.1	838.6	855.5
52.5°	340.2	367.1	407.5	434.5	464.8	535.5	609.6	660.1	700.5	730.9	747.7
55°	235.8	266.1	303.1	330.1	363.7	437.8	508.6	562.5	606.2	633.2	653.4
57.5°	165.0	192.0	229.0	252.6	286.3	357.0	427.7	481.6	525.4	552.3	575.9
60°	111.1	138.1	175.1	198.7	225.7	296.4	360.4	417.6	458.0	485.0	508.6
62.5°	77.5	101.0	138.1	161.7	185.2	245.9	306.5	357.0	397.4	427.7	447.9
65°	60.6	80.8	111.1	131.4	154.9	205.4	256.0	299.8	340.2	370.5	384.0
67.5°	43.8	64.0	87.6	104.4	121.2	165.0	208.8	242.5	279.5	303.1	320.0
70°	30.3	43.8	64.0	77.5	90.9	124.6	158.3	188.6	215.6	232.4	245.9
72.5°	23.6	30.3	43.8	53.9	64.0	87.6	114.5	138.1	158.3	171.8	185.2
75°	13.5	20.2	30.3	37.0	43.8	60.6	77.5	94.3	107.8	117.9	124.6
77.5°	6.7	10.1	16.8	20.2	26.9	37.0	50.5	60.6	70.7	77.5	84.2
80°	6.7	6.7	10.1	10.1	13.5	20.2	26.9	33.7	40.4	47.2	50.5
82.5°	3.4	3.4	6.7	6.7	6.7	10.1	13.5	20.2	23.6	26.9	30.3
85°	3.4	3.4	3.4	3.4	3.4	6.7	6.7	10.1	13.5	16.8	16.8
87.5°	0.0	0.0	3.4	3.4	3.4	3.4	3.4	6.7	6.7	6.7	10.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252646

CATALOG NUMBER: LD6B70D010TE EU6B60709727 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3	2913.3
2.5°	2903.2	2909.9	2906.6	2913.3	2903.2	2899.8	2906.6	2896.5
5°	2866.2	2869.5	2866.2	2866.2	2859.4	2852.7	2859.4	2849.3
7.5°	2808.9	2808.9	2798.8	2798.8	2785.3	2778.6	2778.6	2775.2
10°	2761.7	2751.6	2741.5	2744.9	2724.7	2718.0	2714.6	2711.2
12.5°	2738.2	2731.4	2714.6	2714.6	2694.4	2687.7	2684.3	2680.9
15°	2711.2	2697.8	2684.3	2680.9	2664.1	2657.3	2654.0	2647.2
17.5°	2664.1	2654.0	2637.1	2637.1	2620.3	2616.9	2610.2	2606.8
20°	2613.6	2600.1	2586.6	2586.6	2566.4	2566.4	2556.3	2559.7
22.5°	2542.8	2532.7	2519.3	2519.3	2502.4	2499.0	2488.9	2485.6
25°	2458.6	2445.2	2435.1	2431.7	2418.2	2411.5	2408.1	2401.4
27.5°	2347.5	2337.4	2327.3	2320.5	2303.7	2300.3	2290.2	2293.6
30°	2209.4	2202.7	2199.3	2192.6	2172.4	2165.6	2165.6	2155.5
32.5°	2057.8	2047.7	2041.0	2030.9	2014.1	2010.7	2000.6	2004.0
35°	1872.6	1859.1	1849.0	1852.4	1832.2	1828.8	1822.1	1825.4
37.5°	1680.6	1667.2	1653.7	1650.3	1633.5	1633.5	1623.4	1623.4
40°	1481.9	1468.4	1461.7	1461.7	1441.5	1444.9	1434.8	1431.4
42.5°	1303.4	1289.9	1286.6	1283.2	1273.1	1269.7	1259.6	1263.0
45°	1135.0	1131.6	1131.6	1124.9	1114.8	1111.4	1114.8	1114.8
47.5°	986.8	990.2	986.8	986.8	980.1	986.8	980.1	983.5
50°	862.2	868.9	868.9	868.9	865.6	868.9	868.9	872.3
52.5°	757.8	767.9	764.5	767.9	764.5	771.3	767.9	771.3
55°	666.9	673.6	677.0	680.3	680.3	680.3	680.3	680.3
57.5°	582.7	592.8	596.1	599.5	599.5	606.2	599.5	599.5
60°	515.3	525.4	528.8	532.1	532.1	535.5	528.8	532.1
62.5°	454.7	464.8	464.8	468.1	468.1	468.1	461.4	464.8
65°	394.1	397.4	400.8	400.8	397.4	397.4	394.1	397.4
67.5°	326.7	330.1	326.7	326.7	323.3	323.3	316.6	320.0
70°	252.6	252.6	256.0	252.6	249.2	252.6	249.2	245.9
72.5°	188.6	188.6	188.6	185.2	185.2	181.9	185.2	185.2
75°	128.0	128.0	131.4	131.4	131.4	131.4	128.0	128.0
77.5°	84.2	84.2	84.2	84.2	87.6	84.2	84.2	84.2
80°	53.9	53.9	57.3	57.3	53.9	53.9	53.9	53.9
82.5°	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7
85°	20.2	20.2	20.2	20.2	16.8	16.8	16.8	16.8
87.5°	10.1	10.1	10.1	10.1	10.1	10.1	6.7	6.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)